

# **CURRICULUM VITAE - ROD BERGEN, P.E.**

Electrical Forensic Expert Consultant/Witness  
Nov. 1, 2011

## **EDUCATION:**

Rensselaer Polytechnic Inst., (R.P.I.) Bachelor's Degree in Electronics Engineering  
University of Calif. Los Angeles; Engineering, Mathematics, Psychology and Solar Energy  
Minneapolis-Honeywell Inc. – Electrical Energy Management Theory and Applications  
Siemens Industries - Hybrid Electrical Technology and System Design  
Kyocera Inc. -- Advanced Electric Utility-Tie Photovoltaic Design & Installation  
National Electrical Code – Theory and Practice (Four Semesters)

## **QUALIFICATIONS:**

Electrical Engineer, B.E.E. (R.P.I.)  
Professional Engineer Licensed by State of California as a Registered Professional  
Engineer (Control Systems Engineering - license #CS1806)  
Electrical Contractor Licensed by State of California as a qualified Electrical  
Contractor (Quest - License #443617). This license also authorizes Quest  
to work in Mechanical, Plumbing and General Contracting

## **ELECTRICAL CONTRACTING EXPERIENCE:**

Directed the design and installation of major residential/commercial electrical/electronic systems for 35 years (using mostly “in-house” capabilities)  
Designed, installed and maintained the following activities (residential and commercial):

- Complete House/Workplace electrical wiring
- Total wiring safety analysis (fire prevention)
- Back Up Electrical Power: (Conventional and Photovoltaic)
- Electrical Power Conditioning and Protection
- Electrical Monitoring and Submetering Systems
- Computer Network Wiring
- Home Theatre Audio/Video/Control systems
- Electrical/Electronic Wiring (including integration of cable/satellite systems)

## **CURRENT ELECTRICAL CONSTRUCTION TEACHING POSITIONS:**

UCLA - Engineering Extension (Instructor)  
(2010 UCLA Instructor Honor Roll Award Recipient)  
Santa Monica College (Adjunct Professor)

## **EXPERT WITNESS:**

Qualified to testify as an Electrical Forensic Consultant in the California Superior Courts  
Expert in cases involving electrical malpractice and accident reconstruction

PRESENT ACTIVITY:

President, Quantum Sciences, Inc. (Q.S.I.)

Chief Engineer, Q.S.I dba Quest Electric Systems

Directs the activities of a full-service electrical design & installation company incorporating low voltage and cable/satellite interconnections

General Manager, Q.S.I dba Solar-West Construction Co.

Directs the total design, development and implementation of solar electric and solar thermal energy systems for residential, commercial and industrial applications

Operations Director, The Energy Warehouse (past)

Distributor – Provided alternative energy equipment to the building industry.

ELECTRICAL DESIGN & CONSTRUCT PROJECTS:

St. Joseph's Medical Center, Burbank, Ca. – Designed, developed and installed a computer-controlled electric load scheduler (to reduce the electrical operating costs of the primary critical zone, hydronic chiller, cooling system).

Magnasync/Moviola Corp., North Hollywood – Designed, developed and installed a complete facility electrical load management system using state-of-the-art Minneapolis-Honeywell microprocessor-based equipment (to reduce the company's overall power consumption and improve its electrical efficiency and reliability).

Bechton-Dickenson Pharmaceutical, Oxnard, Ca. – Designed, developed and installed a priority electrical energy management system (to assure the company's cost effective power management operational integrity).

Occidental College, Eagle Rock, Ca. – Designed and proposed a totally integrated energy optimization system (to provide automated electrical load control supplementation and on-line, real-time, dynamic power monitoring).

Prince Hotel, Los Angeles, Ca. - Designed, fabricated and installed the complete electrical control system for the first solar energy powered air conditioning hotel in California

Solar Electric Projects - Designed, assembled, installed and made operable many solar electric systems for both remote, stand-alone and on-line, grid-tie residential systems.

PAST EXPERIENCE

Electrical Computerized Systems Consultant, U.S. Navy

Aerospace Industry (18) years - performed initial system analysis, hardware/software design and final configuration performance evaluation associated with complex large-scale computer-controlled automated electrical systems (implemented in major military applications) as follows:

Sr. Research Scientist, Lockheed-California. Co. - Rye Canyon Research Labs

Sr. Staff Engineer, Emerson Electric Co.- Computer Controlled Test Equip. Div.

Section Head (Act.), Hughes Aircraft Co.- Data Systems Div.

Systems Engineer, Nortronics Div. of Northrop Corp.- Guidance and Controls Div.

Electronics Engineer, Hughes Aircraft Co.- Airborne Computer Systems Div.

Associate Engineer, Douglas Aircraft Co.- Computer Operations Lab.

CONTACT INFORMATION:

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